



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/035,987

12/24/2001

Isaac Levanon

369401-991120

3638

26379 7590 05/29/2009

DLA PIPER LLP (US )  
2000 UNIVERSITY AVENUE  
EAST PALO ALTO, CA 94303-2248

EXAMINER

LAZARO, DAVID R

ART UNIT

PAPER NUMBER

2455

MAIL DATE

DELIVERY MODE

05/29/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/035,987	<b>Applicant(s)</b> LEVANON ET AL.	
	<b>Examiner</b> DAVID LAZARO	<b>Art Unit</b> 2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3/24/09.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 25-29 and 31-36 is/are allowed.
- 6) ☒ Claim(s) 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to the RCE filed 03/24/09.
2. Claims 1-24 are canceled.
3. Claims 25-36 are new claims.
4. Claims 25-36 are pending in this office action.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 5,929,860 by Hoppe (Hoppe).
7. With respect to claim 30, Hoppe teaches 30. (New) A display system for displaying a large-scale image retrieved over a limited bandwidth communications channel, said display system comprising: a) a display of defined screen resolution for displaying a defined image on a client device with limited computing capabilities; b) a memory providing for the storage of a plurality of image parcels displayable over respective portions of a mesh corresponding to said defined image; c) a communications channel interface supporting the retrieval of a defined image parcel;

Art Unit: 2455

and d) a processor coupled between said display, memory and communications channel interface, said processor operative to select said defined image parcel, retrieve said defined image parcel via said communications channel interface for storage in said memory, uniquely render said defined image parcel over a discrete portion of said mesh to provide for a progressive resolution enhancement of said defined image on said display, limit selection of said defined image parcel to where the resolution of said defined image parcel is less than or equal to said defined screen resolution, and prioritize the retrieval of said image parcel among a plurality of selected image parcels pending retrieval, wherein the relative priority of said image parcel is based on the difference in the resolution of said image parcel and the resolution of said plurality of selected image parcels, said processor being responsive to said defined screen resolution, and wherein said defined image being from an image viewpoint that encompasses a viewing frustum placed within a three-dimensional space over the defined image (Col. 17 - Col. 19 line 10 - 3 dimensional image transmission through progressive mesh transmission determining transmitted resolution and lod based on viewing frustum).

***Allowable Subject Matter***

8. Claims 25-29 and 31-36 are allowed.
9. The following is a statement of reasons for the indication of allowable subject matter: The inclusion of the following limitations in claim 25 related to optimally presenting large-scale images:

Art Unit: 2455

“ a) processing source image data to obtain a series K.sub.1-N of derivative images of progressively lower image resolution, and wherein series image K.sub.0 being subdivided into a regular array wherein each resulting image parcel of the array has a 64 by 64 pixel resolution wherein image data has a color or bit per pixel depth of 16 bits representing a data parcel size of 8K bytes, resolution of the series K.sub.1-N of derivative images being related to that of the source image data or predecessor image in the series by a factor of four, and said array subdivision being related by a factor of four such that each image parcel being of a fixed 8K byte size;

b) compressing each image parcel by a fixed 4:1 compression ratio such that each compressed image parcel has a fixed 2K byte size;

c) storing each image parcel on a server in a file of defined configuration such that any image parcel can be located by specification of a K.sub.D, X, Y value, representing the image set resolution index D and corresponding image array coordinate;

d) processing source overlay data into either an open XML or a binary representation containing annotation data in a resolution independent form associated with a display coordinate specification relative to the source image data;

... j) communicating said image parcel and corresponding source overlay data from said server to said local viewing device in a single network data package; and

Art Unit: 2455

k) displaying said large-scale image as a discrete portion of a predetermined image on said local viewing device.”

10. This subject matter, when considering the claim as a whole, is not found in the prior art nor is it obvious in view of the prior art.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Hoppe, H. “Progressive Meshes”, SIGGRAPH '96: Proceedings of the 23rd annual conference on Computer graphics and interactive techniques, 1996, pages 99-108

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID LAZARO whose telephone number is (571)272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2455

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David Lazaro/  
Primary Examiner, Art Unit 2455  
5/22/09